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The DEEP LEVEL MINES of the RAND.

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THE DEEP-LEVEL MINES OF THE RAND.

THE theory, the system, and the value of deep-level mines on the Rand is an important subject, and one which should be familiar to all people who invest in gold shares. It may further be added, without much exaggeration, that upon the results of the deep-level mines depend the development of the Transvaal, the prosperity of its population, and, indirectly, the welfare of the whole of South Africa for a number of years to come.

To understand the subject thoroughly it is necessary to divide it under three heads. These are:—

First. What theories were originally held about deep-levels; and did these theories justify the enormous expenditure upon these mines from 1892 onwards?

Second. Are the original theories being borne out by actual results, therefore justifying the great expenditure.

Third. Facts.

HISTORICAL.

When the Witwatersrand banket reefs were discovered in 1885, expert opinion varied exceedingly as to a diagnosis of their nature. Indeed, for some years after that all knowledge as to their composition was purely empirical. After 1890, however, it gradually became apparent that these reefs had been laid down by the action of water, that the gold contents would, therefore, be evenly distributed, and that they were likely to extend to a great depth. As all these facts were exactly borne out by practice, and as the reef dipped towards the south, it was at once evident that all ground lying to the south, which, except for the first thousand feet or so, had been reckoned as worthless, was in all probability underlaid by the reef, and, therefore, of great prospective value. Most of the mines then in existence had only secured about 1,000 feet of ground on the dip of the reef, and all ground beyond that, henceforth known as deep-level areas, was at once snapped up by capitalists, proprietary syndicates, and such of the outcrop mines as had time to grasp the future possibilities of such areas.

GEOLOGY.

We must now return to a discussion of the theories which had led to this rush for deep-level ground.

A banket reef or bed is a conglomerate of white quartz pebbles cemented together by a mixture of silica and sand, thickly sprinkled with pyrites, and in which mixture the specks of gold, although seldom visible to the naked eye, are found. This conglomerate was originally laid down on the bottom, or perhaps only on the sloping beach, of a great inland sea. The white pebbles were probably the remains of earlier quartz reefs which had been broken into fragments and finally became waterworn. During this process, most of the gold contained in the quartz fragments became liberated, and, in countless specks, by the ceaseless washing of the tides, became evenly distributed throughout the whole bed. In course of time the detritus being washed into this particular sea ceased to contain quartz fragments, so that another layer, containing no quartz and no gold, became deposited on the top of the pebble bed. In the course of a few million years, by the deposition of layer upon layer of sand, the pebble bed is found to be lying several thousand feet below the bottom of the sea, cemented into a compact mass by pressure from above, but still containing the countless specks of gold evenly distributed throughout, and ready for the eventual and profitable use of still uncreated man. In the course of time, by ordinary geological processes, the sea, having fulfilled its particular destiny, flowed elsewhere. As to the final geological process, science is at present in the dark. How has the edge of the pebble bed been again brought to the surface? Was the bed originally the bottom of the sea, and has it been tilted up by a great convulsion of the earth, or was it originally the beach of the sea, and at present lying not much out of its original position? The question is deeply interesting, but the fact remains that, in 1885, the edge was found sticking out on the surface, and since then mining operations and boreholes have proved that the bed, at least, extends without any real break for nearly 4,000 feet down, and that its slope, excepting near the surface, is wonderfully regular.

EXPERTS' OPINIONS.

But all these facts, especially the proving of the reef to great depths, have only been gradually elicited. Shortly after 1890 the best expert opinion foretold, with wonderful accuracy, the finding of the reef in depth, and the extreme probability, owing to its being deposited by water, of the gold contents being just as large at any given depth, approximately, as at the surface.

It must be borne in mind that, since the discovery of the Rand, and particularly as regards the question of deep-levels, gold mining knowledge has had to be largely readjusted. The previous history of deep gold mining consisted almost entirely of quartz veins, which originally in a molten mass had risen and filled the cracks and fissures in the solid rock. In reefs of such nature it is usual to have small rich patches, in which the molten gold, or gold in solution, has settled, and for the remainder of the mass to be worthless. With reefs of such a treacherous nature, to sink a shaft of 1,000 or 2,000 feet on chance would have been a dangerous experiment, so that deep-level mining, up to the days of the Rand, was almost an unpractised science.

Most of the leading gold mining experts of the world have visited the Rand. Their opinions, some of them formed at a time when there were few data to go upon, are unanimously in favour of the accepted theories; that is to say, of the continuation to great depths of the reef; of the reliability of its gold contents at any given depth; and of the sound nature of mining operations connected with its exploitation. And with all this body of expert opinion, entirely favourable to deep-level enterprise, and various facts, such as the finding of the reef in boreholes, becoming known, we may consider the first question satisfactorily answered. The theory as to the permanence and value of the reef in depth justified the sinking of large sums of money, and was, at an early date, confirmed by actual facts.

DEVELOPMENT.

We have now to inquire if the original theories have been fully borne out by results during the last five years, and therefore to judge whether deep-level mining is a scientific, sound, and profitable operation.

Although, speaking generally, the gold contents of the whole banket bed were supposed to be evenly distributed throughout, it was surmised, and correctly so, that the deep level areas directly below the richest outcrop mines would be richer than those beneath the poorer outcrop mines. It also applied that, where the outcrop mine was little disturbed by faults and dykes, the deep-level of the same mine would also probably be comparatively free from such disturbances. With these points in view, the earliest deep-level mines floated were those directly underneath the richest and least disturbed outcrop mines.

In 1892, a large deep-level proprietary company was floated, the Rand Mines, Limited. It held 1,800 claims, selected with great forethought directly beneath all the

richest and least broken outcrop mines. Several boreholes were sunk, notably on the dip of the Geldenhuis and Crown Reef Mines, cutting the reef exactly where predicted, and half a dozen subsidiary deep-level mines, each with from 150 to 200 claims, and each with several hundred thousand pounds working capital, were floated. By this time all the deep-level area on the Rand which was thought to contain the reef even at the extreme depth at which mining could be carried on, was pegged out, and claims in favourable and unfavourable localities were bought and sold for thousands of pounds each. Boreholes were sunk outside of the central and richest portion of the main reef, cutting the load in almost every case, and further companies were floated and financed in the same lavish manner. In 1893, by far the deepest borehole yet sunk struck the reef a long distance below the Simmer and Jack Mine, at a depth of 2,385 feet. As the engineers of most of the already floated deep-level mines estimated that the reef would run out of their ground at a depth of little over 2,000 feet, it at once became apparent that a second row of deep-level mines could be formed to work the still deeper areas, which, owing to the flattening somewhat of the banket bed, still lay within a practical mining depth. To this end the Goldfield Deep Proprietary Company was formed, and its financing was guaranteed by the Consolidated Goldfields of South Africa, Limited. As if to justify this further great undertaking, which involved the sinking of millions of capital, the reef was again struck, in 1895, on the dip of the Meyer and Charlton mine, in the centre of the Rand, at a depth of 3,251 feet. This is the deepest borehole ever sunk in the Transvaal, and it has proved, almost to a certainty, that enough of the pebble bed lies under the Witwatersand to last for 40 years to come.

FACILITIES FOR DEEP LEVEL MINING.

It was soon discovered, as the deep-level operations proceeded, that the natural conditions for deep-level mining on the Rand were almost perfect. There are four drawbacks to very deep mining. These are :—

(1) Loss of value in the ore.
(2) Broken ground.
(3) Water.
(4) Heat.

Owing (1) to the waterlaid origin of the reef, it was almost certain that the gold contents would not become poorer in depth, nor is there the slightest sign to-day that such has happened.

With regard (2) to broken ground, such exists in all mines, and few mines on the Rand are free from faults ; but, on the whole, the faults in the deep-levels have been found to be easily traced, and are not reckoned as a serious factor. The rock formation (3) is so regular that a comparatively small amount of water finds its way into the deepest workings.

Finally (4), the increase in temperature is found by experiments to be not more than 1 degree in 100 feet, and there is no reason why the temperature, with a formation of solid sandstone, should debar mining operations at, at least, 4,000 feet.

The experience gained by the working of the outcrop mines is another point which the engineers of the deep-level mines have in their favour. In the outcrop mines millions of pounds have been spent needlessly upon inferior machinery and installations, upon useless shafts, and upon the tracing of lost portions of reef. In the deep-level equipments the most perfect and efficient machinery is used from the commencement, no useless shafts are sunk, and the tracing of faulted patches of reef, with the plans of the outcrop mines as a guide, is a work of comparative simplicity.

It may indeed be accepted with perfect confidence, that, except in the very deep deep-levels, the working expenses will be no more than those of the outcrop mines. In the deeps there will be a rather higher cost for dynamite, owing to the harder nature of the ground; for labour, owing to the flatter reef necessitating more shovelling of the ore ; and for coal, owing to the greater depth from which the ore has to be hoisted ; but these are mere fractional increases, and are easily balanced by the economy effected by a finer equipment and a more compactly planned surface plant.

DRAWBACKS TO DEEP LEVEL MINING.

It is now necessary, after so much praise, to point out several matters which, to the genuine investor, represent the weak side of the question. As we have seen, the early-floated deep-levels were specially selected with regard to their proximity to rich and little disturbed outcrop mines. As the demand for shares increased, however, a demand which culminated with the boom of 1895, company promoters turned their attention to the deep-level ground of the poorer and more broken mines, with the result that some deep-level mines were floated which should have remained uncapitalised until mining conditions in the Transvaal improve. There is no doubt that these mines will contain the reef, but it is doubtful whether at present it will pay to work. These mines will be specified in due course.

Secondly, there is the question of individual mines being badly cut up by faults and dykes. These mines, too, will be specified. As has been stated, the general question of disturbed ground in the deep-levels is not a very serious one. On the whole, the disturbances are not more serious than in the outcrop mines, and are more easily traced. It so happens, however, that at from 800 to 1,200 feet deep the banket bed, which near the surface lies at a steep angle, here flattens considerably. The result is that at the crack, so to speak, there are, in some localities, patches of badly-disturbed reef, and these patches have been encountered by the development work of several of the deep-level mines. As a matter of fact, these disturbances about a year ago gave rise to some anxiety, but subsequent workings prove that as the reef assumes, in depth, its normal angle, the disturbances die out, and the position generally is now much better than it was at that date. The result is, however, that certain mines have had to spend more money in development work, and have been somewhat retarded in reaching a producing stage. Then, again, there is the question of faults or dykes, at present unknown, that may be encountered deeper. This, of course, is a risk connected with all mining, but a special example may here be cited.

A short time ago the Simmer East Company, a second-row deep-level, sunk a borehole and expected to cut the reef at 2,800 feet. Instead of this, it was found at 1,830 feet, having been thrown up by a fault a distance of nearly 1,000 feet. This may turn out eventually to be a fortunate circumstance for the Simmer East Company, and, indeed, should the fault extend laterally, for a number of the second-row deep-levels ; but at the same time, it shows that serious faults are to be expected even at a great depth, and that the deeper mines will have to carefully locate the reef by boreholes before commencing work. These remarks do not apply so much to the first row of deep-levels, in which it is very unlikely that there are any faults of such a nature.

Thirdly, there is the question of Kaffir labour. Owing to lack of organisation of the great sources of labour on the East Coast, the Kaffir labour supply on the Rand has rarely been equal to the demand. Unless something is done almost immediately to remedy this, the question will become a serious one. A number of the biggest deep-level mines are ready to start crushing with from 100 to 200 stamps, but there seems little likelihood of these mines being able at present to secure labour for more than a quarter of their capacity ; while the Geldenhuis Deep Mine, which commenced to crush two years ago, has not yet been able to make use of more than 75 per cent. of its stamping capacity. The question will remain a serious one until the Transvaal and Portuguese Governments and the Rand Chamber of Mines, come to terms, and then it will be settled with little difficulty. There is good reason to believe that this will shortly be done.

THE FINANCIAL QUESTION.

Fourthly, there is the important question of finance. It will take nearly £10,000,000 over and above money already supplied to bring to a producing stage the 33 deep-level mines already floated on the Witwatersand. Six months ago this question assumed a serious shape. Working capital in many cases was exhausted ; the

capitalists, owing to political unrest, did not feel justified in supplying more, and a number of the deep-level mines were shut down. Since then the position has improved again. Some of the mines, by issuing reserve shares, have been supplied with sufficient cash to bring them to a producing stage, but a number still remain closed down. This question of finance applies more seriously to the second-row deep-levels. These mines require working capital of from £600,000 upwards, and no matter how good their prospects may be, it is at the present juncture almost beyond the resources even of the Consolidated Goldfields, Limited. to finance them. Some of these mines are, therefore, closed down, while only the presumably richest are being carried on. A pamphlet was recently published in London, which attempted to show, in a not inable manner, that some of the second-row deep-levels would not do more than pay working expenses, without earning a dividend. The supposed cost of working, however, was placed at an absurdly high figure, and since then, even, average working expenses on the Rand have been reduced by fully 3s a ton. As a matter of fact, it will probably cost 5s a ton more to operate a second-row deep-level than an outcrop, but that is a figure which leaves an easy margin for profit. After all is said, however, the financial question of deep-levels is a vitally important one: *the mines which are not sufficiently financed*, especially those in the second row, are unsound investments, and the public should deprecate the inflation of their shares, and of the shares of the proprietary companies which control them.

SUMMARY.

Before arriving at the third and concluding stage of our subject, a consideration of facts, we may sum up the position by stating that the theory of deep-levels has been amply borne out by results, and that the future, regarding these mines in the aggregate as sound, honestly managed mining ventures, is likely to be a particularly successful one. The unfavourable features, to be duly weighed are, as has been stated—

(1) Certain mines floated in poor localities.
(2) Individual mines cut up by faults and dykes.
(3) Shortness of Kaffir labour supply.
(4) Serious financial position—in which large sums have to be found, especially to continue the second-row deep-levels.

We now proceed, finally, to a detailed statement of facts about all the deep-level mines and deep-level proprietary companies on the Rand.

There are three proprietary companies, and 33 mines, which may be sub-divided as under :—

Group A. Proprietary.
" B. Controlled by Rand Mines, Limited.
" C. Controlled by Goldfields Deep, Limited.
" D. Other deep-level mines.

GROUP A.—PROPRIETARY.

I.—RAND MINES, LIMITED.

Floated in 1893, as a proprietary company, with assets of about 1,800 claims, freeholds, water-rights, &c., on the Main Reef, but with no working capital. Messrs Wernher Beit and Company receive 25 per cent. of all profits, after 100 per cent. has been paid to shareholders. No dividends have yet been paid. Since flotation the company has realised cash profits of about £1,500,000 on assets sold, but this money has been sunk as working capital in subsidiary companies. In addition, £1,000,000 has been raised on 5 per cent. debentures, issued at 98. This money is also being sunk in subsidiary companies. The Rand Mines, Limited, guarantees the reserve shares in such companies, and so enables them to start crushing without debt.

Of the original 1,800 claims there now remain 388 claims unfloated, and also the freeholds and water rights, while for the claims floated into companies a large number of shares is held. Of the thirteen companies in which shares are held six are now at work and ten will be at work within a year from now. Eventually, should no shares be sold, the yearly dividend to the Rand Mines, Limited, from these thirteen companies, without allowing for further reductions in the cost of mining, should be at least £1,200,000. The eventual income from claims still unfloated, freeholds and water rights, will also be a large one. The following is a statement of liabilities and assets :

LIABILITIES.		£
1. Capital	£400,000	
Less unissued	67,292	
		332,708
2. 5 per cent. debentures	1,250,000	
Less unissued	250,000	
		1,000,000
3. 25 per cent. of profits in perpetuity, after 100 per cent. dividend has been paid.		

ASSETS.	
1. 388 claims on the dip of Nourse Deep, Goch, Wolhuter, Village Main Reef, Robinson, and United Langlaagte.	
2. Freehold and mining rights of 1,250 acres (Mooifontein) on dip of Langlaagte Deep.	
3. Freehold of portion of Langlaagte farm, dams, water-rights, town property, and cash.	
4. Shares in companies (approximate)—	
(*a*) Langlaagte Deep	648,700
(*b*) Jumpers Deep	276,941
(*c*) Nourse Deep	276,217
(*d*) Glen Deep	251,876
(*e*) Crown Deep	232,860
(*f*) South Rand	215,500
(*g*) Paarl Central	199,763
(*h*) Rose Deep	143,920
(*i*) Geldenhuis Deep	122,758
(*j*) Durban-Rood. Deep	59,000
(*k*) Wolhuter	40,330
(*l*) Simmer West	9,771
(*m*) Ferreira Deep	..
(Shares to be received for 81 claims out of a total of 142 claims)	
(*n*) Further reserve shares of all subsidiary companies to be received by Rand Mines, Limited, in order to pay off loans from the latter company	..

In conclusion, it may be said that this great corporation has always been most ably managed and amply financed, and that the necessary cash for further flotations will be forthcoming when occasion demands.

II.—CONSOLIDATED DEEP-LEVELS, LIMITED.

Floated in 1892 as a proprietary company, with assets of Main Reef claims, and £40,000 working capital. Since flotation all the claims have been incorporated in companies. Five dividends have been paid, aggregating over 100 per cent., and also a bonus, consisting of 73,500 Geldenhuis Deep shares.

		£
The capital is	£200,000	
Less unissued	12,750	
		187,250
Assets are, approximately, as under :—		
1. Shares in mines—(*a*) Jumpers Deep	66,000	£
(*b*) Rose Deep	57,667	
(*c*) Witwatersrand Deep	18,260	
		680,000
2. London and Johannesburg property (say)		80,000
3. Cash, or liquid security (say)		200,000

III.—GOLDFIELDS DEEP, LIMITED.

Floated in 1894 as a proprietary company by the Consolidated Gold Fields of South Africa, Limited, and to which the latter company handed over most of its deep-level interests, water rights, &c. The Consolidated Gold Fields also undertook to be responsible for financing all subsidiary companies of the Goldfields Deep. This important point must not be forgotten.

The Goldfields Deep when first floated held 477 Main Reef claims. This total was increased to 1,293 claims by issuing 135,000 reserve shares in payment for such. Up to the present 788 of the claims have been incorporated in companies, which leaves a balance of 510 claims not disposed of. In addition there are freeholds, water rights, &c. The Goldfields Deep had no working capital, but has issued £500,000 of 5½ per cent. debentures, and has placed 200,000 Robinson Deep shares as extra security with the trustees for the debenture holders.

Most of the claims held by the Goldfields Deep lie to the south of the first row of deep-levels, and when incorporated into companies, such companies will actually be the deep-levels of deep-levels. This does not detract from the value of the ore in such claims, but the reef being at a greater distance from the surface, it makes the original cost of developing the mine much greater. The question of finance is, therefore, in a consideration of the value of Goldfields Deep, an unusually important one. As the Consolidated Gold Fields has undertaken to

finance the subsidiary companies of the Goldfields Deep, one must study the finances of that company before proceeding further. The Consolidated Gold Fields recently raised £725,000 (by the issue of 725,000 shares) for the ostensible purpose of financing the Goldfields Deep; and, as it possessed in cash about £250,000 in addition, it would appear that a sum of £1,000,000 is at the disposal of the Goldfields Deep with which to finance its off-shoots.

The subsidiary companies of the Goldfields Deep are—

1. Knight's Deep.
2. Robinson Deep.
3. Simmer West.
4. Simmer East.
5. Jupiter.
6. Rand Victoria.

Of these, Knight's Deep is a first-row deep-level, and the rest are second-row deep-levels, therefore absorbing more cash in initial development.

The following table shows the present financial position of these subsidiary companies:—

	Issued Capital.	Reserve Capital.	Working Capital.	Unpaid Calls.	Further Amounts Necessary.	Position of Company.
	£	£	£	£	£	
Knght's Dp	443,093	106,907	249,911	..	200,000	Snkg shft
Robnsn Dp	400,000	..	600,000	..	..	Developg reef
Simmer W.	300,000	100,000	170,772	70,000	550,000	Shut dwn
Simmer E.	600,000	100,000	286,000	..	500,000	Snkg shft
Jupiter ..	467,200	132,800	208,200	100,000	500,000	Shut dwn
Rand Vict.	630,000	120,000	401,478	380,000	550,000	Not yet com'nced
Totals ..	2,840,293	559,707	1,916,361	550,000	2,300,000	work

From this table we learn the following facts:—

1. That the Consolidated Goldfields and others have yet to provide £550,000, unpaid calls on guaranteed working capitals.

2. That the Consolidated Goldfields and others have, after that, still to provide over £2,000,000, in order to bring these companies to an efficient producing stage.

It is probable that the greater part of these sums will have to be provided by the Consolidated Goldfields, towards which amounts that company has available cash to the extent of nearly £1,000,000.

It may be urged that the recent discovery at the Simmer East, by which in a borehole the reef was found to have been thrown by a fault 1,000 ft. nearer the surface than was estimated, may lead to a considerable reduction in the cost of opening out several of the mines, and so reducing the total estimate of capital necessary. This point, however, is doubtful, because another fault may be found throwing the reef down again, and so neutralising the effect of the recent discovery.

Finally, with regard to finance, it may be said that it is probable that the necessary sums, as they are required, will be provided by the Consolidated Goldfields, but that such financing will be a severe strain upon the resources of that company, and, through it, of the Goldfields Deep, until the matter is finally adjusted, and it will also greatly tend to retard the flotation of further deep level companies by the same group.

With the exception of the Robinson Deep, which will begin crushing in a few months, none of the other subsidiary companies will be ready to produce for some time to come. The eventual results from all the mines floated, and to be floated, by the Goldfields Deep, should be very satisfactory, but in the meantime there are the serious questions to be considered of (1) finance; (2) time to elapse before most of these mines can produce.

A financial statement of the position of the Goldfields Deep is approximately as follows:—

LIABILITIES.	£
1. Capital (all issued)	600,000
2. 5½ % Debentures (issued at 99)	500,000

ASSETS.

1. 510 claims on dip of Village Main Reef, Wolhuter, Nourse Deep and Simmer West.
2. Freeholds, and partial mining rights in the following unproclaimed areas, which lie mostly on the dip of the richest portion of the main reef, and probably within the area in which eventually gold can be profitably mined.

Name.	Dip of	Area. Acres.	Proportion Owned by Goldfields Deep. %
(a) Concordia Estate ..	Langlaagte	2,000	.. 12
(b) Booysen's Estate ..	Crown, Robinson	1,137	.. 50
(c) Turffontein Estate (Mining rights to 2,300 acres)	Robinson, Ferreira....	4,100	.. 15
(d) Klipriversberg Estate	City, Wolhuter.....	2,000	.. 9
(e) City & Suburban Deep Level Syndicate ..	City	..	.. 12
(f) Portion of Driefontein	Glencairn Knights..	600	.. 45

3. About 50,000 shares in sundry concerns, water-rights, &c., or, say, £200,000 cash.
4. Shares in mining companies (approximate)—

(a) Robinson Deep	300,000
(b) Glen Deep	177,062
(c) Jupiter	165,459
(d) Knight's Deep	153,350
(e) Rand Victoria	136,084
(f) Rose Deep	55,200
(g) Simmer East	39,225
(h) Simmer West	21,804
(i) Village Main Reef	5,714

It will be observed that the Robinson Deep shares form the one really great asset in a to-day's valuation of Goldfields Deep. Following upon this, the holdings in Rose and Glen Deep are thoroughly sound, but do not represent a large figure. The holdings in other subsidiary companies are not so large as one would expect, and, as has been shown, no dividend will accrue on them for years to come. The unfloated claims and unproclaimed areas are undoubtedly of great prospective value, but will not yield returns until millions of pounds have been sunk in their development. In the meantime, the question of financing the already floated companies is serious enough to engage all the energies of the Goldfields and Goldfields Deep for a long time to come.

GROUP B. CONTROLLED BY RAND MINES.

(1) GELDENHUIS DEEP.	£
Issued capital	300,000
Reserve capital	50,000
5½ per cent. debentures (issued at 95, redeemable at par)	160,000
Working capital—Originally provided	90,000
Issued reserve shares:—8,899 at £7; 6,101 at £6 15s.; 20,000 at £5	203,475
Debentures	152,000
Profits from working, used as capital (say)..	20,000
	465,475
Cash on hand (say)	100,000
Debt, exclusive of debentures	nil.
Further cash required	nil.

Area.—212 claims.

Capacity.—200 stamps; of which, owing to want of labour, never more than 160 have yet crushed.

History.—Commenced crushing in 1895 with 100 stamps. At that date the mine was not ready, and the labour supply quite inadequate. This necessitated, in order to keep the stamps at work, the milling of hurriedly mined, unsorted ore. For a year the returns were poor. After that the mine was got into proper order, the labour supply improved, 50 more stamps were worked, and the ore sorted on the surface. Since then the yield of gold has been, approximately, the same as the yield of the outcrop mine, the Geldenhuis Estate, and is likely to remain so. Working costs have been considerably reduced, being now about 22s. The remaining stamps will be started whenever the labour supply admits. There are 800,000 tons of ore developed. The future is likely to be successful.

(2) CROWN DEEP.	£
Issued capital	300,000
Reserve capital	nil.
Working capital—Originally provided	50,000
Issued, 50,000 reserve shares at £11	550,000
Current account	80,000
	680,000
Cash on hand	nil.
Debt (say)	50,000
Further expenditure	nil.

Area.—186 claims on dip of Crown Reef, Pioneer, and Robinson Mines.

Capacity.—200 stamps. 140 now at work. Will be increased as labour supply admits.

History.—Commenced crushing August, 1897, with 60 stamps. Yield per ton for August, about 40s, and for September, with 80 stamps, about 46s. The average yield may be estimated at from 45s to 50s until the richer ground under the Bonanza and Robinson is developed, when it should increase materially. Costs should not exceed, with 200 stamps, 20s a ton. Ore developed, 700,000 tons. There are a number of dykes in the mine, which, however, are easily located. The future is likely to be very successful.

(3) ROSE DEEP.	£
Issued capital	400,000
Reserve capital	nil.
Working capital—Originally provided	100,000
Issued reserve shares:—25,000 at £4 5s.; 45,000 at £4 10s (say)	303,000
Current account	120,000
	523,000
Cash on hand	nil.
Debt (say)	100,000
Further capital expenditure	nil.

Area.—181 claims on dip of New Primrose.

Capacity.—200 stamps, which will all be started whenever native labour supply admits.

History.—Commenced crushing with 60 stamps October, 1897; now running 100 stamps. Ore developed, 600,000 tons. Recent development has exposed ore of unusually high value. The mine is badly cut up by dykes, which, however, have been traced. Further capital expenditure, including, perhaps, another shaft, may be necessary to counteract the effect of dykes. The future is likely to be successful

(4) GLEN DEEP.	£
Issued capital	550,000
Reserve capital	50,000
Working capital—Originally provided	134,000
Issued, 50,000 reserve shares at £2	100,000
	234,000
Cash in hand	nil.
Debt	nil.
Further capital expenditure	100,000

Area.—183 claims on dip of Glencairn and May Consolidated Mines.

Capacity.—100 stamps.

General.—Will not commence crushing for six months. The ore development is rather disappointing, but there is hardly enough done to warrant a definite statement as to the future. The results from the two outcrop mines will afford a fair criterion. Ground somewhat broken by dykes.

(5) JUMPERS DEEP.	£
Issued capital	407,391
Reserve capital	nil
Working capital—Originally provided	100,000
Issued 35,797 shares, at par, in exchange for ground	35,797
Sold ground	55,000
Current account	286,000
	476,797
Cash on hand	nil
Debt (say)	286,000
Further capital expenditure	nil

Area.—238 claims on dip of Jumpers and Heriot mines.

Capacity.—200 stamps.

General.—Will commence crushing in January, 1898. Development to date, 450,000 tons, of good assay value, although the richest area under the Heriot Mine has not yet been exploited. The company holds an additional asset of 44,828 Jupiter shares. There is an agreement with the Jumpers Company, by which the latter, on obtaining mining rights under the 51 bewaarplatsen and water-right claims, is to cede them to the Jumpers Deep in consideration either of 14 per cent. of their profits, or of 43,900 shares in the latter company, with the right to subscribe for further 31,950 shares at par, and the present capital of 407,391 shares would have to be increased for this purpose. The future is likely to be highly successful.

(6) LANGLAAGTE DEEP.	£
Issued capital	650,000
Reserve capital	100,000
Working capital—Originally provided	150,000
Current account (say)	185,000
	335,000
Cash on hand	nil
Debt	185,000
Further expenditure	125,000

Area.—184 claims on dip of Langlaagte Estate and Langlaagte Royal Mines.

Capacity.—200 stamps.

General.—Will commence crushing in January, 1898, with the Paarl Central battery. Development to date about 300,000 tons, the value of which has hardly fulfilled expectations, but there is no reason to believe that the eventual result will be different to that of the outcrop mines.

(7) NOURSE DEEP.	£
Issued capital	374,934
Reserve capital	75,066
Working capital—Originally provided	75,000
Current account	420,000
	495,000
Cash on hand	nil
Debt	420,000
Further capital expenditure	nil

Area.—258 claims on dip of Henry Nourse.

Capacity.—100 stamps, which may eventually be increased.

General.—Commenced crushing in November, 1897. Development, about 400,000 tons, of good assay value. A year ago this mine was the most broken up by dykes of all the deep levels, and the outlook for the future was most gloomy. Since then the reefs have been located beyond nearly all the dykes, and are of better value and thicker than before. These facts, together with the high results obtained from the outcrop mine, compel one to estimate the future as likely to be highly successful.

(8) DURBAN-ROODEPORT DEEP.	£
Issued capital	291,000
Reserve capital	59,000
6 % debentures	200,000
Issued pro rata to shareholders at par, with option for 2½ years from October, 1897, to convert into shares at £4.	
Working capital—Originally provided	110,000
Profit on 64,000 Central Roodeport Deep shares received for ground and since sold	72,000
Debenture issue	200,000
	382,000
Cash in hand (say)	100,000
Debts (exclusive of debentures)	nil.
Further capital expenditure	nil.

Area.—235 claims on dip of Durban-Roodepoort Mine.

Capacity.—100 stamps.

General.—Will commence crushing with 40 stamps in April, 1898. Development is satisfactory, approximating to value of outcrop mine. There is an asset of 24,000 Roodepoort Central Deeps, on which an option has been given at 32s 6d. If exercised, this cash would be available for dividend. The future is likely to be successful.

(9) SOUTH RAND.	£
Issued capital	300 000
Reserved capital	nil
Working capital	12,500
Cash on hand	10,000
Debt	nil
Further capital required	750,000

Area.—185 claims on dip of Crown Deep and Langlaagte Deep. Therefore a second-row deep-level.

Capacity.—200 stamps.

General.—No work done yet. Ground of great prospective value.

(10) FERREIRA DEEP.

Not yet capitalised, but will require £420,000 cash.

Area.—142 claims on dip of Worcester, Ferreira and Wemmer Mines.

General.—The ground belongs to the Rand Mines and Barnato Consolidated Companies, in the respective proportions of 59 per cent. and 41 per cent. It is of very great prospective value, as is proved already by the workings of the Robinson Deep, which lies almost directly on the dip. Two shafts will strike the reef in a few months. This mine may possibly be the richest deep-level mine on the Witwatersrand.

GROUP C.—CONTROLLED BY GOLDFIELDS DEEP, LIMITED.

(1) Robinson Deep.	£
Issued capital	400,000
Reserve	nil
5½ per cent. debentures	300,000
Debentures issued at 98, and carry an option to convert into shares at £9, till June 30, 1899.	
Working capital—Originally provided	300,000
Debenture issue	300,000
	600,000
Cash on hand (say)	100,000
Debt (exclusive of debentures)	nil
Further capital expenditure	nil

Area.—213 claims on the dip of Robinson and Ferreira Deep Mines, and therefore a second-row deep-level.

Capacity.—100 stamps.

General.—Crushing will commence with 40 stamps in April, 1898. Development is good, and approximates to the value of the outcrop mines. The ground is somewhat cut up by dykes. The shafts cut the reef at 1,806 and 2,385 feet respectively. The future of this mine should be highly successful.

(2) Simmer West.	£
Issued capital	300,000
Reserve capital	100,000
Working capital—Originally provided	170,772
Cash in hand	70,000
Debt	nil
Further sums required	550 000

Area.—267 claims on dip of Geldenhuis Deep, therefore a second row deep level.

Capacity.—200 stamps.

General.—Shaft sinking is suspended. Several years must elapse before crushing can commence, but the future of the company should be fairly good. There will be a difficulty in financing this mine, which at present greatly detracts from the value of the shares.

(3) Simmer East.	£
Issued capital	600,000
Reserve capital	100,000
Working capital—Originally provided	186,000
Issued, 50,000 reserve shares at £2	100,000
	286,000
Cash in hand (say)	nil
Debt	nil
Further capital required	500,000

Area.—460 claims on dip of Rose Deep and Glen Deep, therefore a second row deep-level.

Capacity.—200 stamps.

General.—Shaft sinking progressing. Present depths, about 1,800 feet in two shafts and 1,000 feet in the third. It was expected that shafts would have to be sunk 2,800 feet, but a borehole recently sunk cut the reef at 1,830 feet, thus showing the reef to have been thrown up nearly 1,000 feet. This will mean a large saving in shaft sinking, but may be more than counterbalanced by broken ground. It is difficult to foretell what effects such a severe fault as this will have, but eventually, if the mine can be properly financed, it should be successful. It is stated that a debenture issue of £500,000, sufficient for all further cash requirements, will be made at once. There can be no crushing for several years.

(4) Rand Victoria.	£
Issued capital	630,000
Reserve capital	120,000
Working capital—Originally provided	401,478
Cash in hand	380,000
Debt	nil
Further cash required	500,000

Area.—903 claims on the dip of the Simmer and Jack, and almost equivalent in depth to a third row deep-level.

Capacity.—300 stamps.

General.—No work has yet been commenced. The distance to be sunk will be between 3,000 and 4,000 feet, and the equipment will cost nearly £1,000,000. Such a flotation as this was hardly warranted, unless with definite arrangements beforehand as to finance. At the present moment there seems little probability of a commencement of operations. The guaranteed working capital has not yet been paid up.

(5) Jupiter.	£
Issued capital	467,200
Reserve capital	132,800
Working capital—Originally provided	208,200
Cash in hand	100,000
Debt	nil
Further cash required	500,000

Area.—511 claims on the dip of the Jumpers Deep, therefore a second row deep-level.

Capacity.—200 stamps.

General.—Shaft sinking is suspended. If this company were properly financed, there is no reason why it should not be ultimately successful, although it will be some years before it reaches a producing stage.

(6) Knight's Deep.	£
Issued capital	443,093
Reserve capital	106,907
Working capital—Originally provided	161,411
Borrowed from Consolidated Goldfields of South Africa	88,500
	249,911
Cash in hand	nil
Debt	88,500
Further cash required	200,000

Area.—185 claims on the dip of Knight's.

Capacity.—100 stamps.

General.—Shafts are about 1,000 feet down, and will cut the reef in a few months. Against its further cash requirements the company has borrowed from the Consolidated Goldfields, at 7 per cent., £88,500, and has given the lending company an option over 29,500 reserve shares at £3. The directors are authorised to dispose of the remaining reserve shares at discretion, and the finances of the company will probably be satisfactorily arranged. The prospects for the future are only moderately good.

GROUP D.—OTHER DEEP-LEVEL MINES.

(1) Village Main Reef.	£
Issued capital	250,000
Reserve capital	20,000
Working capital—Originally provided (say)	150,000
Issued, 3,000 reserve shares, at £6 10s	19,500
Issued, 40,000 reserve shares, at £5 10s	220,000
Issued, 30,000 reserve shares, at £3 10s	105,000
Current account (say)	110,000
	604,500
Cash in hand	nil
Debt	110,000
Further capital required	nil

Area.—82 claims on the dip of Salisbury, Jubilee, and City and Suburban mines.

Capacity.—100 stamps.

General.—Crushing will commence in January, 1898. This mine was originally worked on a small scale, with successful results. Development, 350,000 tons of good value. Estimated profits, 18s to 20s a ton. The company owns an asset of 25,000 Wemmer shares received in exchange for eleven claims.

Knight's Central Deep.	£
Issued capital	412,739
Reserve capital	112,261
Working capital—Originally provided	200,000
Cash in hand	50,000
Debt	nil
Further cash required	500,000

Area.—445 claims on the dip of Knight's Deep, therefore a second row deep level.

Capacity.—200 stamps.

General.—Operations are being resumed. Only one shaft will, in the meantime, be continued, in order to economise capital outlay, and it will be connected underground with the east shaft of the Simmer East. It was estimated that the shafts would cut the reef at 2,800 and 3,100 feet respectively, but, should the up throw fault, encountered in the Simmer East, extend laterally, the reef will be cut at 1,870 and 2,210 feet. Present depth of shafts 736 and 669 feet. The future success of the company is doubtful.

(3) WITWATERSRAND DEEP.	£
Issued capital	351,900
Reserve capital	48,100
Working capital—Originally provided	162,500
Cash in hand	nil
Debt	nil
Further cash required	250,000

Area.—276 claims on dip of Knight's Balmoral and Ginsberg mines.

Capacity.—100 stamps.

General.—The South reef was cut at a depth of 200 feet. A small amount of development has been done, exposing about 50,000 tons worth 11 dwts, over 20 inches of reef. These results are poor, but the development is over so limited an area that it must not be taken as a criterion. There is every reason to believe that when both reefs are fully developed the results will improve, and the company should have a successful future.

(4) ANGELO DEEP.	£
Issued capital	435,000
Reserve capital	65,000
Working capital—Originally provided	202,500
Cash in hand	140,000
Debt	nil
Further cash required	400,0

Area.—306 claims on the second dip of the Angelo, Driefontein, and Comet Mines; therefore a second row deep, level.

Capacity.—150 stamps.

General.—The reefs will hardly be cut under 2,500 ft. Two shafts are started, but only one is now being carried on. If properly financed this mine should eventually have a successful future.

(5) CHIMES MINES, LIMITED.	£
Issued capital	375,000
Reserve capital	50,000
Working capital—Originally provided	50,000
Cash on hand	30,000
Debt	nil
Further cash required	600,000

Area.—510 claims on the dip of the Kleinfontein Central; therefore a second row deep-level.

Capacity.—150 stamps.

General.—No work commenced. A borehole was sunk cutting the reef at 1,754 feet. The width was 3 feet, and the value 16 dwts. As the outcrop mine, the Kleinfontein, is of low grade, it is doubtful whether its second row deep-level can be worked with great profit. The finance question for this mine is a serious one. The future is doubtful.

(6) KLEINFONTEIN CENTRAL.	£
Issued capital	225,000
Reserve capital	25,000
Working capital—Originally provided (say)	80,000
Cash in hand	40,000
Debt	nil
Further cash required	400,000

Area.—163 claims on dip of New Kleinfontein Mine.

Capacity.—150 stamps.

General.—Shaft sinking is suspended. Assuming the company to be successfully financed, the value can be calculated from the returns of the outcrop mine. The reef in the Kleinfontein Central is proved by the borehole sunk by the Chimes mines. There is an asset on hand of 19,548 Chimes West shares. The mine should eventually be payable.

(7) BONANZA.	£
Issued capital	200,000
Reserve capital	nil
Working capital—Originally provided	75,000
Profits used as capital (say)	75,000
	150,000
Cash nil, debt nil, and further cash required	nil

Area.—11 claims on dip of Pioneer Mine.

Capacity.—40 stamps.

General.—Commenced crushing in 1896. A debt of £75,000 was paid off, and two dividends aggregating 75 per cent., have been paid. The claims are at present capitalised at £80,000 each, which is more than their intrinsic value as an investment.

(8) BANTJES DEEP.	£
Issued capital	400,000
Reserve capital	nil
Working capital—Originally provided	100,000
Cash on hand	90,000
Debt	nil
Further cash required	750,000

Area.—448 claims on dip of Bantjes Mine, and in depth almost equivalent to a third row deep-level.

Capacity.—200 stamps.

General.—Work not commenced. The financing of such a concern as this is almost hopeless. The reef will hardly be cut under 4,000 feet, and has not yet been proved payable in the outcrop mine. This undertaking is unsound in every respect.

(9) LANGLAAGTE BLOCK B DEEP.	£
Issued capital	75,000
Reserve capital	nil
Working capital—Originally provided	nil
Cash on hand	nil
Debt	10,000
Further cash required	300,000

Area.—54 claims on dip of Langlaagte Block B Mine.

Capacity.—60 stamps.

General.—No work yet done. The prospects of this mine, which will be low grade, will improve as working cost on the Rand become reduced. The ground will probably be amalgamated with adjoining claims. Eventually it should pay to work.

(10) VOGELSTRIUS DEEP.	£
Issued capital	330,000
Reserve capital	70,000
Working capital—Originally provided	112,500
Sundry assets realised and current account (say)	22,500
	135,000
Cash in hand	nil
Debt	25,000
Further cash required	275,000

Area.—376 claims on dip of Vogelstruis Estate.

Capacity.—150 stamps.

General.—Shaft sinking suspended. The three shafts are down from 800 to 1,000 feet, and the reef will be cut at from 1,200 to 1,600 feet. The poor results from the outcrop mine do not warrant further expenditure until working costs have been materially reduced. When such has happened, the company may resume operations with the hope of, at least, paying expenses. There is an asset on hand of 11,400 Bantjes shares.

(11) ROODEPOORT DEEP.	£
Issued capital	175,000
Reserve capital	5,000
Working capital—Originally provided (say)	140,000
Current account	100,000
	240,000
Cash on hand	nil
Debt	100,000
Further cash required	40,000

Area.—54 claims on the dip of the Durban and United Roodepoort mines. Also a second block of about 90 claims on the dip of the Durban Roodepoort Deep.

Capacity.—40 stamps.

General.—Commenced crushing in March, 1896; but owing to poor management, to there being only one shaft, to lack of development, and to financial difficulties, the mine did not pay expenses, and was shut down. The mine contains ore of as good value as the outcrop mines, but is too small to be worked separately. The shareholders, who have hardly acted wisely, have decided to reconstruct the company, pay off the debt of £100,000, and sink another shaft. They would have done better in accepting the offer of the Durban Roodepoort, which company proposed to take over the Roodepoort Deep, with its liabilities, for a certain number of Durban shares. The second block of claims is a valuable asset.

(12) EAST ROODEPOORT DEEP.	£
Issued capital	170,000
Reserve capital	30,000
Working capital—Originally provided	113,750

Cash in hand	110,000
Debt	nil
Further cash required	300,000

Area.—161 claims on dip of Kimberley Roodepoort Mine.

Capacity.—100 stamps.

General.—Work not yet commenced. Owing to the low value of the ore in the outcrop mine, the future of this company must be considered as highly doubtful.

(13) CENTRAL ROODEPOORT DEEP.

	£
Issued capital	220,000
Reserve capital	30,000
Working capital—Originally provided	100,000
Cash in hand	nil
Debt	nil
Further cash required	370,000

Area.—190 claims on the dip of the Princess Mine.

Capacity.—100 stamps.

General.—There is only one shaft. It is now about 1,000 feet deep. From the bottom of the shaft a bore-hole was put down, and has cut the reef at 1,320 feet. If properly financed, the future of this mine, on the whole, should be a successful one.

(14) WEST ROODEPOORT DEEP.

	£
Issued capital	227,200
Reserve capital	2,800
Working capital—Originally provided	100,000
Cash on hand	nil
Debt	nil
Further cash required	300,000

Area.—245 claims on dip of Princess and Banket Mines.

Capacity.—80 stamps.

General.—Operations suspended. The reef has been cut in both shafts, at 894 and 1,152 feet respectively. The ground is broken by faults, but approximate in value to the outcrop mines. Givens atisfactory financial arrangements, the mine should eventually pay to work.

(15) STEYN ESTATE.

	£
Issued capital	240,000
Reserve capital	60,000
Working capital—Originally provided	120,000
Issued 40,000 shares at £2	80,000
	200,000
Cash in hand	170,000
Debt	nil
Further cash required	600,000

Area.—660 claims on dip of Central and West Roodepoort Deep mines, and about equivalent to a third row deep-level.

Capacity.—200 stamps.

General.—No work done. The reef will not be cut under 3,000 ft. The satisfactory financing of the company is problematical. The company holds a further asset of an estate on the Black Reef, with a yearly revenue, from claim licences, of £5,000 to £6,000; it has prospected reefs on this estate, but without successful results. The cash balance is invested in good Rand securities. The future, as a mining company, is doubtful.

(16) SOUTH RANDFONTEIN DEEP.

	£
Issued capital	225,000
Reserve capital	50,000
Working capital—Originally provided	50,000
Cash on hand	45,000
Debt	nil
Further cash required	500,000

Area.—119 claims on dip of South Randfontein Mine

Capacity.—80 stamps.

General.—No work done. The future of this undertaking is highly doubtful.

(17) CINDERELLA DEEP.

	£
Issued capital	178,333
Reserve capital	56,667
Working capital—Originally provided	75,000
Cash on hand	78,000
Debt	nil
Further cash required	500,000

Area.—290 claims on dip of Cinderella Mine, and equivalent in depth to a second row deep-level.

Capacity.—100 stamps.

General.—No work done. Reef will not be struck under 2,000 feet. The future is doubtful.

TABLE showing the FINANCIAL POSITION of the DEEP-LEVEL MINES.

I.—CONTROLLED by RAND MINES, LIMITED.

Name.	Total Issued Capital, £1 Shares.	Working Capital Already Provided, Including Money Borrowed.	Further Sums Required.	Reserve Shares.
	£	£	£	£
Geldenhuis Deep	300,000	465,475	..	50,000
Crown Deep	300,000	680,000	..	..
Rose Deep	400,000	523,000	..	..
Glen Deep	550,000	234,000	100,000	50,000
Jumpers Deep	407,391	476,797	..	..
Langlaagte Deep	650,000	335,000	125,000	100,000
Nourse Deep	374,934	495,000	..	75,066
Durban Roodepoort Deep	291,000	382,000	..	59,000
South Rand	300,000	12,500	750,000	..
Ferreira Deep	..	..	420,000	..
Total (10 mines)	3,573,325	3,603,772	1,395,000	334,066

II.—CONTROLLED by GOLDFIELDS DEEP.

	£	£	£	£
Knight's Deep	443,093	249,911	200,000	106,907
Robinson Deep	400,000	600,000	..	..
Simmer West	300,000	170,772	550,000	100,000
Simmer East	600,000	286,000	500,000	100,000
Jupiter	467,200	208,200	500,000	132,800
Rand Victoria	630,000	401,478	550,000	120,000
Total (6 mines)	2,840,293	1,916,361	2,300,000	559,707

III.—OTHER DEEP LEVELS.

(*a*) In good or fair localities, therefore justifying further expenditure.

	£	£	£	£
Village Main Reefs	250,000	604,500	..	20,000
Witwatersrand Deep	351,900	162,500	250,000	48,100
Angelo Deep	435,000	202,500	400,000	65,000
Kleinfontein Central	225,000	80,000	400,000	25,000
Bonanza	200,000	150,000	..	..
Roodepoort Deep	175,000	240,000	40,000	5,000
Central Roodepoort Deep	220,000	100,000	370,000	30,000
West Roodepoort Deep	227,200	100,000	300,000	2,800
Total (8 mines)	2,084,100	1,639,500	1,760,000	195,900

(*b*) In poor or doubtful localities, therefore not justifying, at least for the present, further expenditure.

	£	£	£	£
Knight's Central Deep	412,739	200,000	500,000	112,261
Chimes Mines	325,000	50,000	600,000	50,000
Bantjes Deep	400,000	100,000	750,000	..
Langlaagte "B" Deep	75,000	..	300,000	..
Vogelstruis Deep	330,000	135,000	275,000	70,000
East Roodepoort Deep	170,000	113,750	300,000	30,000
Steyn Estate	240,000	200,000	600,000	60,000
South Randfontein Deep	225,000	50,000	500,000	50,000
Cinderella Deep	178,333	75,000	500,000	56,667
Total (9 mines)	2,356,072	923,750	4,325,000	428,928
Grand total (33 mines)	10,853,790	8,083,383	9,780,000	1,518,661

TABLE showing DEEP-LEVEL DEBENTURE ISSUES.

Name.	%	Amount.	Remarks.
		£	
Rand Mines, Limited	5	1,000,000	Redeemable at 103 by 12 annual drawings from 1901, or at 105 by giving six months' notice.
Goldfields Deep	5½	500,000	Redeemable at par by 15 annual drawings from 1900, or at 105 by giving six months' notice.
Geldenhuis Deep	5½	160,000	Redeemable at par by 10 annual drawings from January, 1898.
Durban Roodepoort Dp.	6	200,000	Option to convert into shares at £4 till April, 1900, or redeemable at 103 by 10 yearly drawings from 1901.
Robinson Deep	5½	300,000	Option to convert into shares at £9 till June, 1899, or redeemable in 10 annual drawings.
Simmer & Jack East	5½	500,000	Now in course of being issued. Redeemable at par by 15 annual drawings from July 1, 1902, or at 103 at any time after January 1, 1901, by giving six months' notice Debentures carry an option till December 31, 1900, to convert into shares at £4.

CONCLUSION.

The general conclusion to be arrived at after a survey of the financial position of the deep-levels is as follows:—

There are thirty-three mines, which will cost approximately to bring to a proficient producing stage £17,863,383, or, roughly, £541,000 each. Towards this sum £8,083,383 has been already provided, and £9,780,000 has still to be provided.

This is an unsatisfactory financial position, but is relieved considerably by the following facts:—

(1) The successful financing of all companies controlled by the Rand Mines, Limited, is assured.

(2) The Consolidated Goldfields, which finances the subsidiary companies of the Goldfields Deep, has about £1,000,000 in hand towards this purpose, and is already engaged in financing the Simmer and Jack East.

(3) Most of the mines which are hard pressed for money will raise it gradually until the reef is struck. The then results, if favourable, will enable the balance of cash required to be more easily secured.

(4) Ten of the mines, or nearly one-third of the total, are not justified under present conditions, either owing to poor locality, or great depth of the reef, in proceeding with operations. These ten mines consist of the nine specified in separate table as doubtful, and the Rand Victoria, which has not yet commenced work. The amount of cash required for the equipment of these ten mines, over and above that already supplied, is £4,875,000.

It may be assumed, therefore, that the further amount necessary to bring all the mines to an efficient producing stage is £9,780,000; that ten of these mines, which require £4,875,000 of this total, are not justified in at present proceeding with operations; that the actual necessary requirements of the deep-levels at an early date amount to the balance, equal to a sum of £4,905,000; and that part of this need only be raised gradually as required.

DEEP-LEVEL SHARES AND THEIR MARKET VAL

It is, of course, a most difficult matter to estimate, in cut-and-dried figures, the intrinsic value of Rand deep-level shares, especially as most of the mines have not yet arrived at a producing stage.

Readers of the ECONOMIST have now at their disposal practically all the known facts, and many will doubtless prefer to make their own calculations from these facts.

The investor who buys deep-level shares to-day will have the benefits of cheaper working costs, which are gradually being lowered, irrespective of Government reforms, of more stamps being erected as the labour supply improves, and of a much wider market for deep-level shares as these mines gradually enter the dividend-paying list. It must also be remembered that the life of nearly every deep-level mine, even with its 200 stamps, may be reckoned at about 20 years. On the other hand, it may be urged that so few deep-level shares are held by the public that the present market values are more or less fictitious, and that the purchaser at these prices is likely to buy an article that will not be readily saleable for, perhaps, years to come.

For those who do not care to go into details for themselves, a short summary is appended which deals with each deep-level share from a market point of view.

This is as follows:—

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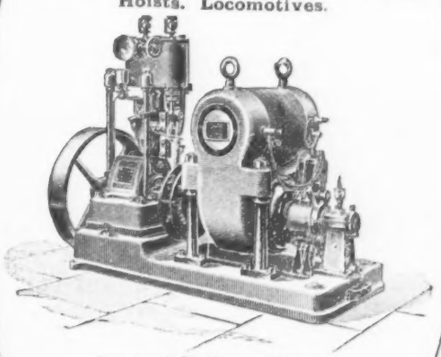

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CONSOLIDATED DEEP LEVELS..Shares worth their present price, but not likely to go much higher.

GOLDFIELDS DEEP .....Speculative, and not likely to pay a dividend for a long time. Eventually shares should go higher. The debentures are very safe.

GELDENHUIS DEEP.....Shares worth their present price, or perhaps rather more, on intrinsic value. The debentures are good.

CROWN DEEP .....Shares worth their present price, or perhaps more, on intrinsic value.

ROSE DEEP .....Shares fully high enough already, even on the good results obtained to date.

GLEN DEEP .....On results of development to date the shares are not worth more than their present price.

JUMPERS DEEP .....Shares worth their present price on intrinsic value.

LANGLAAGTE DEEP ....Eventually these shares should be worth rather more than their present price.

NOURSE DEEP.....Eventually these shares should be worth more than their present price.

DURBAN ROODEPOORT DEEP..Eventually these shares should be worth more than their present price. The debentures are good.

SOUTH RAND .....Eventually these shares should be worth considerably more than their present price, but the question of finance must be studied.

FERREIRA DEEP.....These shares when issued may safely be bought at a capitalised value per claim of £40,000.

ROBINSON DEEP.....These shares eventually, when 200 stamps are at work, will be worth even more than their present price. The debentures are good.

SIMMER WEST .....When the company is fully financed, but not until then, the shares at present price will be a good speculation.

SIMMER WEST .....The shares at present price are a good speculation, but will not yield dividends for years. The debentures are good.

RAND VICTORIA .....The shares are not a good speculation.

JUPITER.....When properly financed, but not until then, the shares at present price will be a good speculation.

KNIGHT'S DEEP .....The shares at present prices, on results obtained from the outcrop mine, are only a moderately good speculation.

VILLAGE MAIN REEF....On intrinsic value the shares are worth about their present price.

KNIGHT'S CENTRAL DEEP..The shares are hardly a good speculation.

WITWATERSRAND DEEP..When this company is financed the shares should again rise to £2 or £2 10s.

ANGELO DEEP .....The shares are a good speculation, and should eventually be worth £3 or £4.

CHIMES MINES .....The shares are not a good speculation.

KLEINFONTEIN CENTRAL..The shares, at present prices, are a fairly good speculation.

BONANZA .....The shares at present prices, taking into consideration the small area of the mine, are rather too high.

BANTJES DEEP .....The shares are not a good speculation.

LANGLAAGTE BLOCK B DEEP..The shares, at present price, are a fairly good speculation.

VOGELSTRUIS DEEP ....The shares, at present price, are a doubtful speculation.

ROODEPOORT DEEP.....The shares in the reconstructed company, at the present price, are only moderately good.

EAST ROODEPORT DEEP..The shares are not a good speculation.

WEST ROODEPORT DEEP..The shares, at present price, are a good speculation.

CENTRAL ROODEPORT DEEP..The shares, at present price, are a good speculation.

STEYN ESTATE .....The shares, at present price, are only a moderately good speculation.

SOUTH RANDFONTEIN DEEP..The shares are not a good speculation.

CINDERELLA DEEP.....The shares are not a good speculation.

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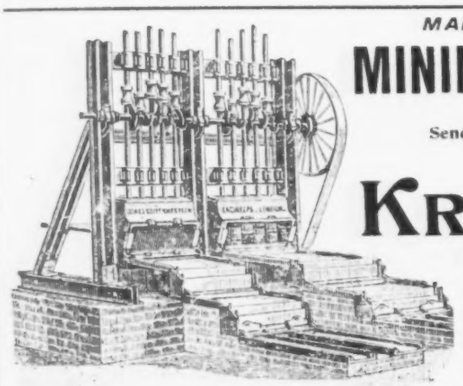

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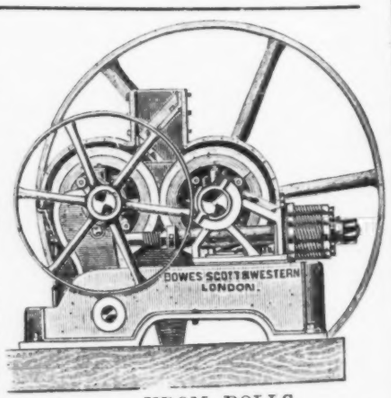

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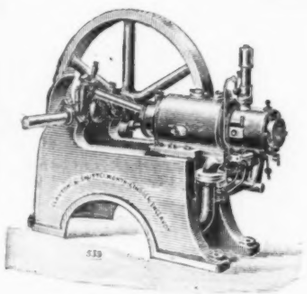

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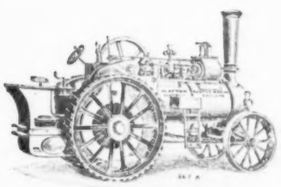

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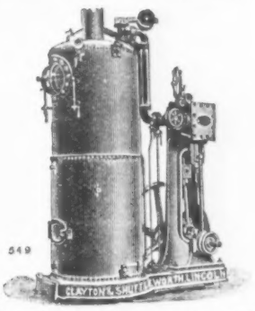

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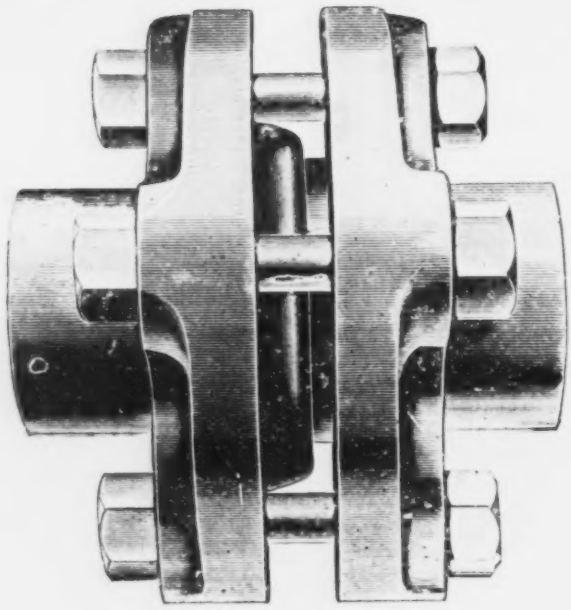

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